

I claim:

1. A remote controller structure allowing a user to manipulate functions of an associated remotely positioned host device; said remote controller including a housing,  
5 said housing having a battery socket allowing batteries to be inserted into said housing, said batteries to serve as an electrical power source for electronic circuitry within said housing; a plurality of finger depressible buttons  
10 electrically associated with said circuitry for allowing a user selection of function-control signals communicated from said remote controller to said host device; said circuitry including an emitter for communicating user selected function-control signals from said remote  
15 controller to the host device; at least one of said sensors including a depressible dome shaped member and a compression-sensitive variable-conductance structure, the compression-sensitive variable-conductance structure capable of providing at least three readable states of  
20 varied electrical conductance, said states dependant upon compression levels applied to the compression-sensitive variable-conductance structure through depression of at least one of said finger depressible buttons against the dome shaped member;  
25 means for reading said at least three readable states of said compression-sensitive variable-conductance structure and for forming distinct function-control signals for each of at least two states of said at least three readable states.
- 30 2. A remote controller structure according to claim 1 wherein,  
said compression levels include:  
a) no compression applied by the user,  
b) low compression applied by the user, and  
35 c) high compression applied by the user wherein said

high compression is greater than said low compression; and  
said communicating of user selected function-control  
signals from said remote controller to the host device  
includes said emitter and a receiver on said host device.

5           3. A remote controller structure according to claim  
2 wherein said distinct function-control signals for each  
of at least two states of said at least three readable  
states are

10           scroll control signals each with a rate of scroll  
aspect different one from the other, the scroll control  
signals with scroll rate aspects are associated with  
available television channels, and said host device is at  
least associated with a television.

15           4. A remote controller structure according to claim  
2 wherein said distinct function-control signals for each  
of at least two states of said at least three readable  
states are

control signals for variable channel change rate.

20           5. A hand-holdable remote controller operatively  
associated with an electronic remote device positioned  
remotely of said remote controller, said remote controller  
including improvements comprising:

25           at least one finger depressible button interfacing  
with a sensor electrically associated with electronic  
circuitry allowing a user selection of function-control  
signals communicated to said remote device; said sensor  
including a depressible dome member and a pressure-  
sensitive variable-conductance structural arrangement  
capable of providing at least three readable states of  
30           varied conductance, at least two of said states dependant  
upon depressive pressure levels applied to the pressure-  
sensitive variable-conductance structural arrangement  
through depression of said finger depressible button;

said electronic circuitry including means for differentiating between said at least three readable states of said pressure-sensitive variable-conductance structural arrangement and for communicating to said remote device distinct function-control signals for each of said at least two of said states.

6. A hand-holdable remote controller operatively associated with an electronic remote device positioned remotely of said remote controller according to claim 5 wherein, said at least two of said states correlate to A) low pressure applied as a pressure by the user to said button and associated with a first of said two states, and B) high pressure applied as a pressure higher than said low pressure to said button, said high pressure associated with a second of said two states.

7. A hand-holdable remote controller operatively associated with an electronic remote device positioned remotely of said remote controller according to claim 6 wherein said distinct function-control signals for each of said at least two of said states are

scroll function-control signals with rate of scroll aspects.

8. A hand-holdable remote controller operatively associated with an electronic remote device positioned remotely of said remote controller according to claim 7 wherein said electronic remote device is at least associated with a television, and said scroll function-control signals are associated with available channels selectable with a tuner.

9. A hand-holdable remote controller operatively associated with an electronic remote device positioned

remotely of said remote controller according to claim 6 wherein said distinct function-control signals for each of said at least two of said states are

video play function-control signals with rate of  
 5 video play aspects; and said electronic remote device is at least associated with recorded video playing.

10. A hand-holdable remote controller operatively associated with an electronic remote device positioned remotely of said remote controller according to claim 6  
 10 wherein said distinct function-control signals for each of said at least two of said states are

audio play function-control signals; and said electronic remote device is at least associated with a audio playback capable device.

15 11. A controller for controlling a host device, said controller comprising: a housing, electronic circuitry within said housing, a plurality of finger depressible buttons exposed on said housing and interfacing with sensors electrically associated with said circuitry for  
 20 allowing user selection of function-control signals output from said controller to the host device;

at least one of said sensors structured as an analog pressure-sensitive sensor;

said circuitry including means for reading at least  
 25 three readable values of said analog pressure-sensitive sensor;

said host device enabling display of recorded video controlled by said controller allowing variable video speed dependant upon the degree of depressive pressure  
 30 applied to said analog pressure-sensitive sensor.

12. A controller for controlling a host device according to claim 11 including

at least three of said sensors structured as analog

pressure-sensitive sensors; of the plurality of finger depressible buttons:

a reverse video speed control button associated with a first of said analog pressure-sensitive sensors,

5 a forward video speed control button associated with a second of said analog pressure-sensitive sensors,

a fast forward video speed control button associated with a third of said analog pressure-sensitive sensors.

13. A controller for controlling a host device  
10 according to claim 12 wherein at least one of the video speed control buttons is a dual role sensor.

14. An improved method of controlling at least one function-control of a host device using a hand-held remote controller operatively associated with a wireless  
15 communication link to said host device,

wherein the improvement comprises:

depressing, by the user, a depressible surface associated with an analog pressure sensor with a first level of user selectable pressure of a plurality of user  
20 selectable pressure levels, said depressing of said depressible surface activating a first change rate function-control signal of a plurality of activatable change rate function-control signals associated with said depressible surface to be sent from said remote controller  
25 to said host device;

and then,

depressing, by the user, said depressible surface with a second level of user selectable pressure different than said first level of pressure and causing activation  
30 of a second change rate function-control signal associated with said depressible surface to be sent from said remote controller to said host device, whereby the user selects and activates change rate function-control signals associated with said depressible surface by way of

selecting the selectable pressure applied to said depressible surface.

15. An improved method according to claim 14 wherein said change rate function-control signals are utilized as  
5 scroll rate function-control signals associated with available selectable television channels.

16. An improved method according to claim 14 wherein said change rate function-control signals are utilized as  
10 recorded video playback rate function-control signals.

17. An improved method according to claim 14 wherein said change rate function-control signals are utilized as audio playback rate function-control signals.

18. A method of manufacturing an improved hand-held  
15 controller including the steps of: molding a housing; installing electronic circuitry; installing a plurality of finger depressible buttons with sensors electrically associated with said circuitry; installing a flexible dome-cap member as a component of at least one of said  
20 sensors;

installing a pressure-sensitive variable-conductance structure under said flexible dome-cap member, said pressure-sensitive variable-conductance structure positioned to be activated by depression of one of the  
25 depressible buttons, said pressure-sensitive variable-conductance structure structured to provide at least three readable analog values, said values dependant upon depressive pressure levels applied to said one of the depressible buttons;

30 said circuitry including means for reading an immediate value of said at least three readable analog values of said pressure-sensitive variable-conductance

structure, and for outputting from said controller, data representative of the immediate value as a signal useful for effecting an associated television.

19. A method of manufacturing an improved hand-  
5 holdable remote controller according to claim 18 further including providing said flexible dome-cap member made of elastomeric material; and further wherein said flexible dome-cap member is structured to provide a user discernable tactile feedback upon depression of the  
10 associated button.

20. An improved hand-holdable remote controller for controlling a host device wherein said host device includes a channel tuner, and said remote controller outputs at least two distinct function-control signals to  
15 said host device, said two distinct function-control signals are signals for causing a scrolling of available channels, said two distinct function-control signals are each different one from the other so that differing rates of scrolling are determined by said two distinct function-  
20 control signals, said two distinct function-control signals selectable by a human user by way of varying finger pressure on a finger depressible surface located on said remote controller, wherein the rate of scrolling of available channels can be varied by varied pressure  
25 applied to said depressible surface.

21. An improved hand-holdable remote controller for controlling a host device according to claim 20 further including

an elastomeric dome member structured to provide the  
30 human user a discernable tactile feedback upon depression of said depressible surface.

22. An improved hand-holdable remote controller for

controlling a host device according to claim 21 including a pressure-sensitive analog output sensor associated with said finger depressible surface, said analog output sensor capable of outputting at least three values differing one  
5 from the other and determinable by varying finger pressure against said finger depressible surface.

23. An improved hand-holdable remote controller for controlling a host device according to claim 22 including analog to digital converting means for converting at least  
10 two of said at least three values into digital values.